Aug. 3, 1926. 1,594,485

N. C. AUSTIN

INCANDESCENT LAMP FOR AUTOMOBILE HEADLIGHTS

Filed August 4, 1924

Fig. 1.

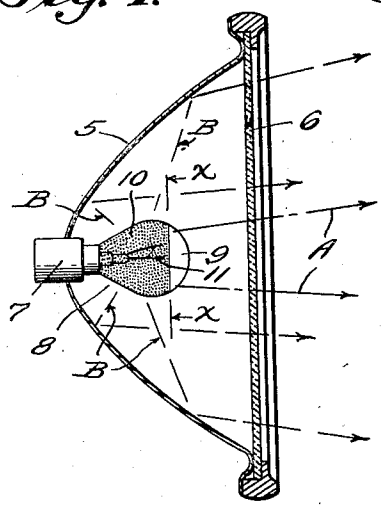


Fig. 2.

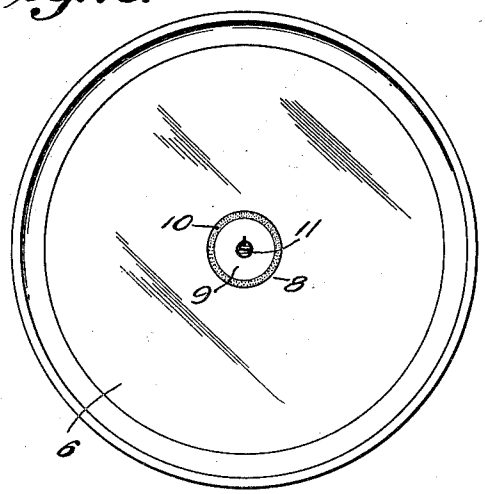


Fig. 3.

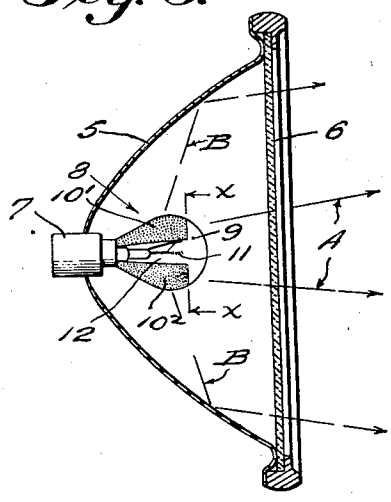
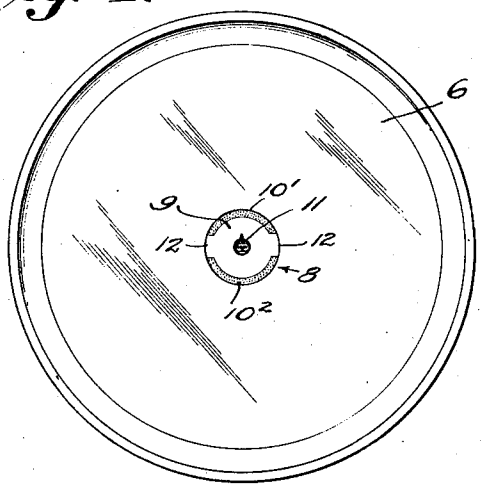


Fig. 4.



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UNITED STATES PATENT OFFICE.

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INCANDESCENT LAMP FOR AUTOMOBILE HEADLIGHTS.

Application filed August 4, 1924. Serial No. 729,865.

This invention relates to headlights of motor vehicles or the like, and more especially, to lamps for use in conjunction with headlight reflectors.

The object of the invention, generally, is to provide simple, inexpensive and effective means for eliminating the objectionable glare due to reflected light rays in headlights.

More specific objects and advantages of the invention will appear in the following specification.

In the accompanying drawing, in which similar reference characters denote corresponding parts in all of the views,—

Figure 1 is a side elevation of my improved lamp applied to a headlight which is shown in longitudinal section; and Fig. 2 is a front elevation of the same. Fig. 3 is a view similar to Fig. 1 showing a modified form of the invention; and Fig. 4 is a front elevation of Fig. 3.

In said drawing, the numeral 5 designates a headlight reflector, conventionally known as a parabolic reflector, and 6 is a transparent pane of glass which is connected to the front of the reflector by any known or suitable means.

Provided in the reflector axis is a socket 7 for the bulb 8 of an incandescent electric lamp, as hitherto.

According to the present invention a lamp bulb is treated or formed to provide a surface or surfaces adapted to modify and control certain of the light rays so that the same will produce no blinding effect upon the eyes of a pedestrian or the driver in an approaching vehicle.

The embodiment of the invention illustrated in Figs. 1 and 2, consists in providing the bulb 8 with a clear or transparent front portion 9 and a rear portion, indicated by 10, which is frosted, painted or otherwise made translucent or semi-transparent. More particularly, the semi-transparent portion 10 extends from a plane x—x, Fig. 1, in front of the lamp filament 11 to the rear end of the bulb.

By such an arrangement what are known as direct rays, denoted by A, are delivered as a beam through the clear portion 9 of the bulb unobstructedly while the indirect rays, so called, denoted by B, directed to the reflector are modified in their passage through the semi-transparent portion 10 of the lamp.

The beam of light passing through the clear portion 9 of the bulb is, moreover, projected from the lamp to illuminate the road far ahead of the associated vehicle with an absence of glare, but the indirect or reflected light rays which are dispersed by the reflector is modified by being screened through the semi-transparent portion of the globe and is thereby rendered unobjectionable to the eyes of an observer.

The embodiment of the invention shown in Figs. 3 and 4, like that described with reference to Figs. 1 and 2, has the bulb 8 provided with a transparent front portion 9 but its rear portion is formed or provided with semi-transparent upper and lower regions 10^1 and 10^2 separated by transparent meridians 11 which are located at diametrically opposite sides of the bulb.

By such devices the reflected light rays above and below the lamp are modified, but unmodified or high power light is projected from the bulb 8, (Figs. 2 and 3) to the reflector at opposite sides in addition to the beam of light projected from the transparent front end of the bulb.

The relatively narrow beams reflected at opposite sides in a substantially horizontal plane afford a horizontal fan-like strata of illumination which assists the driver of a car with an absence of glare to the eyes of an observer.

What I claim is:—

1. The combination with a reflector having a lamp socket in the axis thereof, of an incandescent lamp bulb engaging in said socket, the entire top and bottom portions of the bulb being translucent and terminating in a vertical plane in front of the lamp filament, the front of the bulb and the central horizontal portion of the bulb being transparent whereby a horizontal band of clear light will be transmitted from said lamp.

2. The combination with a reflector, of a lamp bulb in the axis thereof, said bulb having translucent top, bottom and rear portions, a transparent tip portion and a horizontal, transparent band on each side, whereby the light projected therefrom will consist of a horizontal band of clear light having a circular central portion and a surrounding portion of diffused light.

Signed at Tacoma, Washington, this 15th day of July 1924.

NATHAN C. AUSTIN.